UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

22850

7590

05/25/2005

OBLON, SPIVAK, MCCLELLAND, MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314 EXAMINER SMOOT, STEPHEN W

PAPER NUMBER

ART UNIT

DATE MAILED: 05/25/2005

| 1 | APPLICATION NO. FILING DATE 10/687.085 10/17/2003 |  | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|---|---|--|----------------------|---------------------|------------------|
|   |   |  | Hiroshi Maeda        | 244081US2           | 9074             |

TITLE OF INVENTION: FLIP CHIP MOUNTING METHOD OF FORMING A SOLDER BUMP ON A CHIP PAD THAT IS EXPOSED THROUGH AN OPENING FORMED IN A POLYIMIDE FILM THAT INCLUDES UTILIZING UNDERFILL TO BOND THE CHIP TO A SUBSTRATE

| APPLN. TYPE    | SMALL ENTITY | ISSUE FEE | PUBLICATION FEE | TOTAL FEE(S) DUE | DATE DUE   |  |
|----------------|--------------|-----------|-----------------|------------------|------------|--|
| nonprovisional | NO           | \$1400    | \$300           | \$1700           | 08/25/2005 |  |

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. <u>PROSECUTION ON THE MERITS IS CLOSED</u>. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE REFLECTS A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE APPLIED IN THIS APPLICATION. THE PTOL-85B (OR AN EQUIVALENT) MUST BE RETURNED WITHIN THIS PERIOD EVEN IF NO FEE IS DUE OR THE APPLICATION WILL BE REGARDED AS ABANDONED.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

- II. PART B FEE(S) TRANSMITTAL should be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). Even if the fee(s) have already been paid, Part B Fee(s) Transmittal should be completed and returned. If you are charging the fee(s) to your deposit account, section "4b" of Part B Fee(s) Transmittal should be completed and an extra copy of the form should be submitted.
- III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

Complete and send this form, together with applicable fee(s), to: Mail

Mail Stop ISSUE FEE Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or Fax (703) 746-4000

INSTRUCTIONS: This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where appropriate. All further correspondence including the Patent, advance orders and notification of maintenance fees will be mailed to the current correspondence address as indicated unless corrected below or directed otherwise in Block 1, by (a) specifying a new correspondence address; and/or (b) indicating a separate "FEE ADDRESS" for maintenance fee notifications.

| maintenance fee notification                                       | DE ADDRESS (Note: Use Block 1 for   |   | specifying  | a new c   |   |  |   |  |  |
|--|---|---|---|---|---|--|---|--|--|
| , , , , , , , , , , , , , , , , , , ,                              |   |   |   |   | Note: A certificate of mailing can only be used for domestic mailings of the Fee(s) Transmittal. This certificate cannot be used for any other accompanying papers. Each additional paper, such as an assignment or formal drawing, must have its own certificate of mailing or transmission. |  |   |  |  |
|  | 590 05/25/2005  |   |   |   | have its own certificate  | e of mailing or transmission.  |   |  |  |
| OBLON, SPIVA   | K, MCCLELLAND,  | MAIER & N   | EUSTAD  | T,  | Cei   | rtificate of Mailing or Trans  | smission  |  |  |
| P.C.   |   |   |   | •   | I hereby certify that the   | nis Fee(s) Transmittal is bein   | g deposited with the United                             |  |  |
| 1940 DUKE STRE   | FT  |   |   |   | States Postal Service with sufficient postage for first class mail in an envel  |  |   |  |  |
| ALEXANDRIA, V  |   |   |   | I hereby certify that this Fee(s) Transmittal is being deposited with the United States Postal Service with sufficient postage for first class mail in an envelope addressed to the Mail Stop ISSUE FEE address above, or being facsimile transmitted to the USPTO (703) 746-4000, on the date indicated below. |   |  |   |  |  |
| ,  |   |   |   |   |   |  | (Depositor's name)                                      |  |  |
|  |   |   |   |   |   |  | (Signature)   |  |  |
|  |   |   | <del></del>   |   | Ĺ <u></u>   |  | (Date)  |  |  |
| APPLICATION NO.  | FILING DATE   | F   | IRST NAME   | D INVEN   | TOR   | ATTORNEY DOCKET NO.  | CONFIRMATION NO.  |  |  |
| 10/687,085   | 10/17/2003  |   | Hiroshi   | Maeda   |   | 244081US2  | 9074  |  |  |
|  | FLIP CHIP MOUNTING M<br>DE FILM THAT INCLUDES   |   |   |   |   | PAD THAT IS EXPOSED T<br>STRATE  | THROUGH AN OPENING                                      |  |  |
| APPLN. TYPE  | SMALL ENTITY  | ISSUE FE  | E   | PU  | JBLICATION FEE  | TOTAL FEE(S) DUE   | DATE DUE  |  |  |
| nonprovisional   | NO  | \$1400  |   |   | \$300   | \$1700   | 08/25/2005  |  |  |
| EXAM   | IINER   | ART UNIT  |   | CI  | ASS-SUBCLASS  | ]  |   |  |  |
| SMOOT, S   | TEPHEN W  | 2813  |   |   | 438-108000  |  |   |  |  |
| 1. Change of correspondence  | e address or indication of "Fe  | ee Address" (37   | -   | _   | the patent front page, li   |  |   |  |  |
| <u></u> ,-   | lence address (or Change of (22) attached.  | Correspondence  | (1) the names of up to 3 registered patent attorneys or agents OR, alternatively, |   |   |  |   |  |  |
|  |   |   | (2) the nar   | me of a   | single firm (having as a  | member a 2   |   |  |  |
| "Fee Address" indicate PTO/SB/47; Rev 03-02 of Number is required. | tion (or "Fee Address" Indica<br>or more recent) attached. Use  | tion form<br>of a Customer  | registered attorney or agent) and the names of up to                              |   |   |  |   |  |  |
|  | RESIDENCE DATA TO B   | E PRINTED ON T  |   |   | •   |  |   |  |  |
|  |   |   |   | 4   | •• /  | nee is identified below, the d   | locument has been filed for                             |  |  |
|  | PLEASE NOTE: Unless an assignee is identified below, no assignee data will appear on the patent. If an assignee is identified below, the document has been filed for recordation as set forth in 37 CFR 3.11. Completion of this form is NOT a substitute for filing an assignment.  (A) NAME OF ASSIGNEE  (B) RESIDENCE: (CITY and STATE OR COUNTRY) |   |   |   |   |  |   |  |  |
| Please check the appropriate                                       | assignee category or category   | ries (will not be pri   | nted on the p   | atent) :  | ☐ Individual ☐ Co   | orporation or other private gro  | oup entity  |  |  |
| la. The following fee(s) are                                       | enclosed:   | 4b.   | Payment of  | Fee(s):   |   | <u></u>  |   |  |  |
| ☐ Issue Fee  |   |   | <u> </u>  | ` '   | nount of the fee(s) is en   | closed.  |   |  |  |
|  | mall entity discount permitte   |   | Payment by credit card. Form PTO-2038 is attached.                                |   |   |  |   |  |  |
| Advance Order - # of   |   |   |   |   |   |  | credit any overpayment, to                              |  |  |
|  |   |   | Deposit Acc   | ount Nu   | mber  | harge the required fee(s), or (enclose an extra c  | opy of this form).                                      |  |  |
| ~  | (from status indicated above  | •   | n   |   |   |  |   |  |  |
|  | MALL ENTITY status. See 3   |   |   |   |   | LL ENTITY status. See 37 C   |   |  |  |
| NOTE: The Issue Fee and Pronterest as shown by the reco            | is requested to apply the Issu<br>ublication Fee (if required) words of the United States Pate  | e Fee and Publicati<br>rill not be accepted<br>nt and Trademark ( | on Fee (if an from anyone Office.   | y) or to<br>other th  | re-apply any previously an the applicant; a regi  | y paid issue fee to the applica<br>stered attorney or agent; or the  | ation identified above.  The assignee or other party in |  |  |
| Authorized Signature   |   |   |   |   | Date  |  |   |  |  |
| Typed or printed name  |   |   |   |   |   |  |   |  |  |
| tickandra, viigina 22313-  | 1430.   |   |   |   |   | he public which is to file (and<br>minutes to complete, includir<br>mments on the amount of tig<br>Trademark Office, U.S. Dep.<br>S. SEND TO: Commissioner |   |  |  |



### United States Patent and Trademark Office

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

| APPLICATION NO.        | FILING DATE        | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|------------------------|--------------------|----------------------|-------------------------|------------------|--|
| 10/687,085             | 10/17/2003         | Hiroshi Maeda        | 244081US2               | 9074             |  |
| 22850                  | 7590 05/25/2005    | EXAMINER             |                         |                  |  |
| •                      | K, MCCLELLAND, MAI | SMOOT, ST            | SMOOT, STEPHEN W        |                  |  |
| P.C.<br>1940 DUKE STRI | EET                |                      | ART UNIT                | PAPER NUMBER     |  |
| ALEXANDRIA,            | <del></del>        |                      | 2813                    |                  |  |
|                        |                    |                      | DATE MAILED: 05/25/200: | 5                |  |

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 32 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 32 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571) 272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at (703) 305-8283.